

accompanying claims.

5 WHAT IS CLAIMED IS:

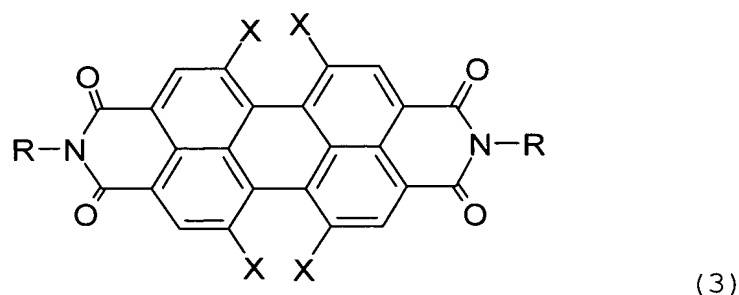
1. A chemiluminescent composition producing white light, comprising:

an oxalate solution consisting of a perylene compound,
10 a fluorescer, an oxalate compound and a solvent; and

an activator solution consisting of hydrogen peroxide,
a solvent and a catalyst

wherein the perylene compound includes a 1,6,7,12-tetrahaloperylenedicarboximide represented by Formula 3 below:

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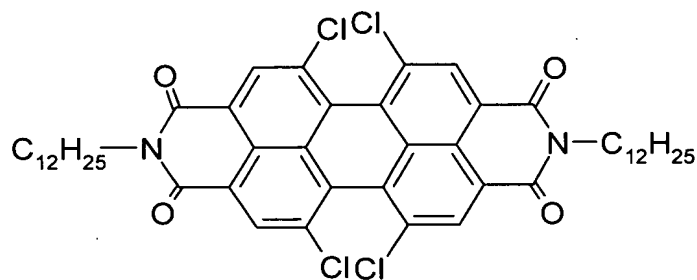


wherein R is an alkyl or aryl group, and X is Cl or Br.

20 2. The chemiluminescent composition according to claim 1, wherein the compound of Formula 3 is a perylene compound

wherein R is a C₁₋₂₀ alkyl group.

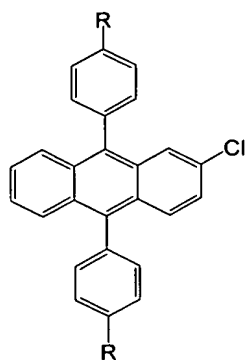
3. The chemiluminescent composition according to claim 2, wherein the compound of Formula 3 is N,N'-didodecyl-1,6,7,12-tetrachloroperylene-3,4,9,10-dicarboximide represented by Formula 5 below:



4. The chemiluminescent composition according to claim 1, wherein the compound of Formula 3 is a compound wherein R is an aryl group.

5. The chemiluminescent composition according to claim 1, wherein the fluorester is a blue light-emitting anthracene compound.

6. The chemiluminescent composition according to claim 5, wherein the blue light-emitting anthracene compound is a 2-chloro-9,10-bis(4-substituted phenyl)anthracene represented by Formula 6 below:



(6)

wherein R is an alkyl or alkoxy group.

7. The chemiluminescent composition according to claim
 5 6, wherein the anthracene compound of Formula 6 is 2-chloro-
 9,10-bis(4-methylphenyl)anthracene (in the Formula 6, R is a
 methyl group), and 2-chloro-9,10-bis(4-
 methoxyphenyl)anthracene (in the Formula 6, R is a methoxy
 group).

8. The chemiluminescent composition according to claim
 1, wherein the fluorester includes 2-ethyl-9,10-
 bis(phenylethynyl)anthracene emitting green light.

9. The chemiluminescent composition according to claim
 5, wherein the fluorester further includes 2-ethyl-9,10-
 bis(phenylethynyl)anthracene emitting green light.

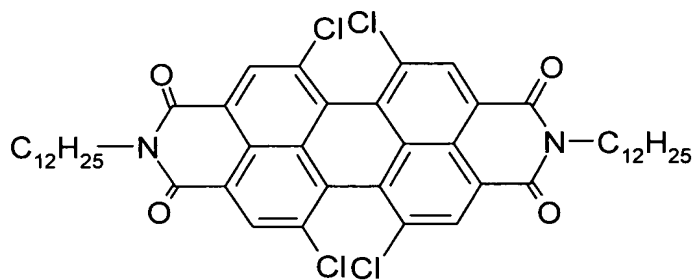
10. The chemiluminescent composition according to
 claim 1, wherein the oxalate compound is bis(2,4,5-trichloro-

6-carbopentoxyphenyl) oxalate.

11. The chemiluminescent composition according to claim 1, wherein the solvent is an ester-based organic solvent.

12. A chemiluminescent composition producing white light, comprising:

an oxalate solution consisting of N,N'-didodecyl-1,6,7,12-tetrachloroperylene-3,4,9,10-dicarboximide represented by Formula 5 below:



(5), a fluorescer, an

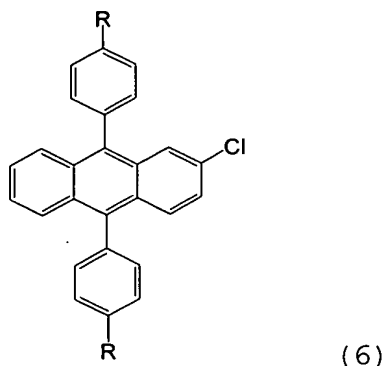
oxalate compound and a solvent; and

an activator solution consisting of hydrogen peroxide, a solvent and a catalyst

wherein the fluorescer is a blue light-emitting anthracene compound.

13. The chemiluminescent composition according to claim 12, wherein the blue light-emitting anthracene compound is a 2-chloro-9,10-bis(4-substituted phenyl)anthracene

represented by Formula 6 below:



wherein R is an alkyl or alkoxy group.

5 14. The chemiluminescent composition according to
claim 13, wherein the anthracene compound of Formula 6 is 2-
chloro-9,10-bis(4-methylphenyl)anthracene (in the Formula 6, R
is a methyl group), and 2-chloro-9,10-bis(4-
methoxyphenyl)anthracene (in the Formula 6, R is a methoxy
10 group).

15 15. The chemiluminescent composition according to
claim 12, wherein the fluorester includes 2-ethyl-9,10-
bis(phenylethynyl)anthracene emitting green light.

16. The chemiluminescent composition according to
claim 12, wherein the oxalate compound is bis(2,4,5-trichloro-
6-carbopentoxyphenyl)oxalate.

20 17. The chemiluminescent composition according to

claim 12, wherein the solvent is an ester-based organic solvent.